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Air Screwdrivers

7R Series

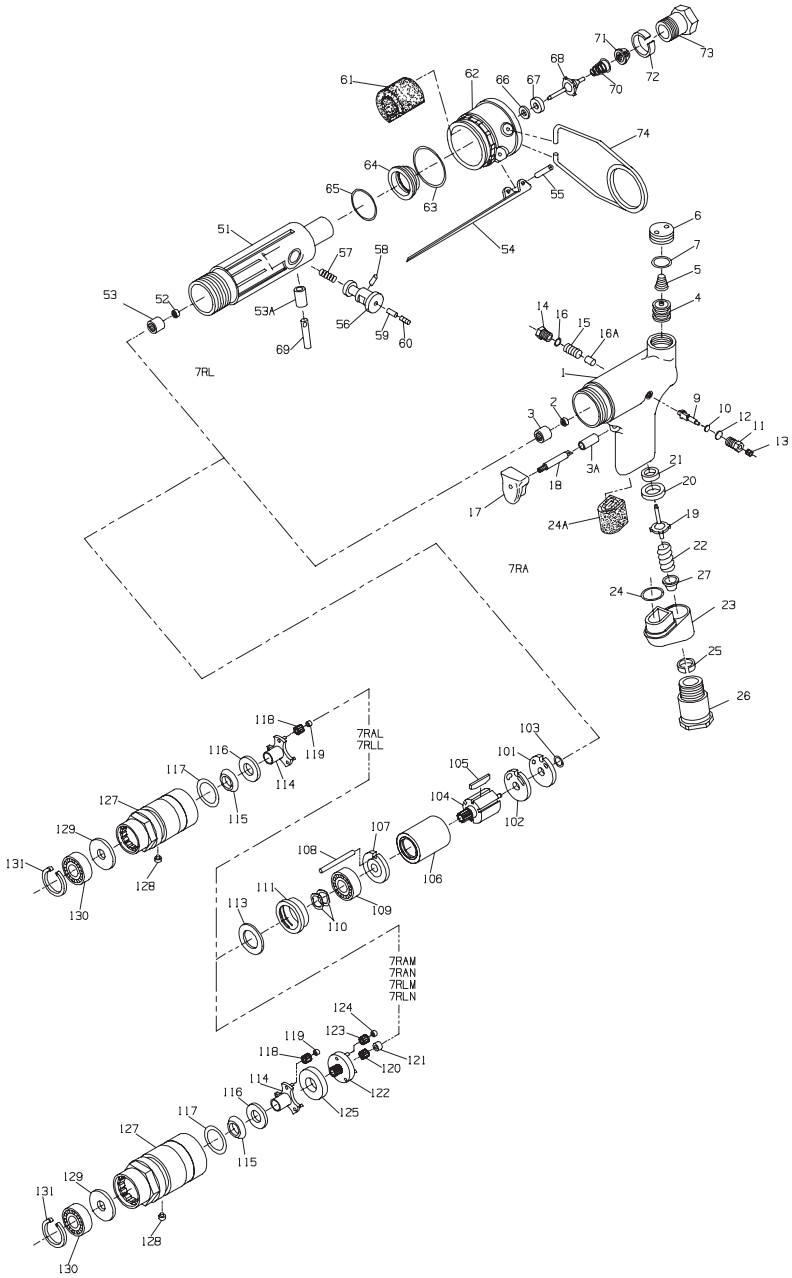
Parts Information



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 **Ingersoll Rand**[®]

7R Motor Housing Assembly Exploded Diagram



(Dwg. TPA898-4)

7R Motor Housing Assembly Parts List

Item	Part Description	Part Number
	Motor Housing Assembly	
	for models ending in -EU	7RA-EU-A40
	for all other models	7RA-A40
1	Motor Housing	
	for models ending in -EU	7RA-EU-B40
	for all other models	7RA-B40
*	Warning Label	
	for models ending in -EU	EU-99
	for all other models	WARNING-7-99
2	Bearing Ejecting Nut	7AH-105A
†• 3	Rear Rotor Bearing	7AH-24
3A	Trigger Bushing	4RA-91
4	Reverse Valve	7RA-329
5	Reverse Valve Spring	7RA-515
6	Reverse Valve Cap	7RA-269
†• 7	Reverse Valve Cap Seal	7RA-358
	Actuating Valve Assembly	7RA-A516
9	Actuating Valve	7RA-B516
†• 10	Actuating Valve Face	R2F-167
11	Actuating Valve Bushing Assembly	7RA-A518
12	Valve Bushing Seal	R0BRIC-283
13	Actuating Valve Button	7RA-520
14	Actuating Valve Cap Assembly	7RA-A517
15	Actuating Valve Spring	7RA-519
†• 16	Actuating Valve Cap Seal	R0BRIC-283
16A	Actuating Valve Bumper	7RA-664
17	Trigger Assembly	7AH-A93
18	Trigger Pin	7AH-94
† 19	Throttle Valve	7RAK-302
† 20	Throttle Valve Seat	7RAK-303
21	Throttle Valve Seat Support	7RAK-304
† 22	Throttle Valve Spring	7AH-51
23	Muffler Assembly	3RA-A123
†• 24	Muffler O-Ring	85H-167
† 24A	Muffler Element	7RA-311
25	Inlet Bushing Spacer	7AH-65
26	Inlet Bushing Assembly	7AH-A565
† 27	Air Strainer Screen	R0A2-61
*	Dead Handle (for 7RANP1)	R1A-48
*	Pinch Bolt (for 7RANP1)	510-638
*	Dead Handle Adapter (2) (for 7RANP1)	7A-49
*	Nameplate	
	for models ending in -EU	4RA-EU-301
	for all other models	4RA-301
*	Nameplate Screws (2)	BN403-302
*	Horizontal Hanger	7RA-366
	Motor Housing Assembly	
	for models ending in -EU	7RL-EU-AL40
	for all other models	7RL-AL40
51	Motor Housing	
	for models ending in -EU	7RL-EU-B40
	for all other models	7RL-B40
*	Warning Label	
	for models ending in -EU	EU-99
	for all other models	WARNING-7-99

* Not illustrated.

• To keep downtime to a minimum, it is desirable to have on hand certain repair parts. We recommend that you stock one (pair or set) of each part indicated by a bullet (•) for every four tools in service.

† Indicates Tune-up Kit part.

7R Motor Housing Assembly Parts List

Item	Part Description	Part Number
52	Bearing Ejecting Nut	7AH-105A
†• 53	Rear Rotor Bearing	7AH-24
53A	Plunger Bushing	5RLK2C-91
54	Throttle Lever	7L-L273
55	Throttle Lever Pin	7L-120
56	Reverse Valve	7RL-329
57	Reverse Valve Spring	55RP-515
58	Reverse Valve Lock Pin	7RL-347
59	Lock Pin Retainer	74L-56
60	Retainer Set Screw	7RL-669
† 61	Muffler Element	7L-311
62	Exhaust Deflector	7L-23
†• 63	Exhaust Deflector Seal	7A-379
64	Exhaust Silencer	7L-310
†• 65	Silencer Seal Ring	WWW100A1-43
66	Throttle Valve Seat Support	7RAK-304
†• 67	Throttle Valve Seat	7RAK-303
† 68	Throttle Valve	7RAK-302
69	Throttle Valve Plunger	7RL-94
† 70	Throttle Valve Spring	7L-51
†• 70	Air Strainer Screen	R0A2-61
72	Inlet Bushing Spacer	7AH-65
73	Inlet Bushing	7L-565
74	Suspension Ball	7L-365
*	Dead Handle (for 7RLMC1)	R1A-48
*	Pinch Bolt (for 7RLMC1)	510-638
*	Dead Handle Adapter (2) (for 7RLMC1)	7A-49
†• 101	Rear End Plate Gasket	7RL-739
102	Rear End Plate	7RL-12
† 103	Rear End Plate Retainer	7AH-118
104	Rotor	7RL-53
†• 105	Vane Packet (set of 4 Vanes)	7RL-42-4
106	Cylinder	7RL-3
107	Front End Plate	7AH-11
108	Cylinder Dowel	7AH-98
†• 109	Front Rotor Bearing	R1-22
110	Bearing Spring Washer (2)	7AH-278
111	Front Rotor Bearing Housing	7AH-13
113	Bearing Housing Spacer	7AH-81
114	Spindle Assembly	
	for N ratio	7LK-A8
	for L ratio	7LL-A8
	for M ratio	7LM-A8
115	Seal Support	5RAK-5
116	Seal Retaining Washer	7L-303
† 117	Seal	182A53-610
118	Spindle Planet Gear Assembly (3)	
	for N ratio (21 teeth)	7AK-A10
	for L ratio (22 teeth)	7AL-A10
	for M ratio (18 teeth)	7AJ-A10
119	Spindle Planet Gear Bearing (1 for each Gear)	
	for L or N ratio	7AK-500
120	Rotor Pinion (for M and N ratios)	7AH-17
121	Rotor Pinion Spacer (for M and H ratios)	7AH-18

* Not illustrated.

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† Indicates Tune-up Kit part.

7R Motor Housing Assembly Parts List

Item	Part Description	Part Number
122	Gear Head	
	for M ratio	7AM-216
	for N ratio	7AN-216
123	Gear Head Planet Gear Assembly (3) (for M and H ratios)	7AH-A10
124	Planet Gear Bearing (1 for each Gear)	7AH-500
125	Gear Head Spacer	7AN-80
	Gear Case Assembly	
	for L ratio	7LH-A37A
	for M and N ratios	7LM-A37A
127	Gear Case	
	for L ratio	7LH-B37A
	for M and N ratios	7LM-B37A
128	Grease Fitting	D0F9-879
129	Grease Shield	5R-701
130	Spindle Bearing	R1L-24
131	Spindle Bearing Retainer	7L-28
*	Grease Gun	R000A2-228
*	Reverse Valve Cap Wrench	141A12-26
*	Tune-up Kit	
	for Models 7RALC1, 7RALD1, 7RAMC1, 7RALP1, 7RAMC3, 7RAMP1, 7RANP1 and 7RALC3 (includes illustrated parts: 3, 7, 10, 16, 19, 20, 22, 24, 24A, 27, 101, 105, 109 and 117)	7RA-S/D-TK1
	for Models 7RLLC1, 7RLLC3 and 7RLMC1 (includes illustrated parts: 53, 61, 63, 65, 67, 68, 70, 101, 103, 105, 109 and 117)	7RL-S/D-A/T-TK1

* Not illustrated.

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† Indicates Tune-up Kit part.

Series 7 Clutches Parts List

Item	Part Description	7C1	7C3
	Cushion Clutch Attachment (assembled with Medium Clutch Spring)	7C1	7C3
201	Clutch Housing Assembly	7C1-A580A	7C3-A580A
202	Housing Bushing	7P1-781	7C3-781
203	Finder Retaining Spring	---	102A60-628
204	Adjusting Hole Cover	7C-415A	7C-415A
	Clutch Driver Assembly (assembled with Medium Clutch Spring)	7C-A581A	7C-A581A
* 205	Clutch Driver	7C-581A	7C-581A
* 206	Front Clutch Jaw	7C-589A	7C-589A
* 207	Jaw Bearing Ball (12)	2U-696	2U-696
* 208	Clutch Ball Spacer	7C-401A	7C-401A
* 209	Clutch Release Ball (9)	4U-31	4U-31
* 210	Clutch Ball Seat	7C-627	7C-627
211	Clutch Spring		
	Light (black)	7C-L583A	7C-L583A
	Medium (yellow)	7C-583A	7C-583A
	Heavy (green)	7C-H583A	7C-H583A
212	Spring Seat Stop	7C-704B	7C-704B
213	Clutch Spring Seat	7C-623	7C-623
214	Spring Seat Bearing	R02W-696	R02W-696
215	Adjusting Nut Lock	7C-588A	7C-588A
216	Clutch Adjusting Nut	7C-582A	7C-582A
* 217	Plunger Spring	4C-626	4C-626
* 218	Disengaging Plunger	7P1-584	7P1-584
219	Bit Holder	7C1-586A	---
* 220	Retaining Sleeve Spring	5C1-931-4	---
* 221	Bit Retaining Sleeve	5C1-930-4	---
221A	Sleeve Spring Retainer (Blue)	5C1-853	---
222	Bit Retaining Ball	RX1-629	---
223	Bit Holder Assembly	---	7C3-A586
224	Bit Retaining Spring	---	102A60-241
225	Bit Retaining Ball	---	AV1-255
226	Finder Spring	---	102A60-242
*	Bit Holder Guide	---	102A60-630
*	Clutch Adjusting Key	5C1-416	5C1-416

* Not illustrated.

• To keep downtime to a minimum, it is desirable to have on hand certain repair parts. We recommend that you stock one (pair or set) of each part indicated by a bullet (*) for every four tools in service.

Series 7 Clutches Parts List

Item	Part Description	7D1
	Direct Drive Attachment	7D1
301	Housing Assembly	7P1-A580
302	Housing Bushing	7P1-781
303	Spacer	7D1-211
304	Spacer Retainer	7AH-118
* 305	Bit Holder	7D1-586
* 306	Bit Retaining Ball	RX1-629
* 307	Retaining Sleeve Spring	5C1-931-4
* 307A	Sleeve Spring Retainer (Blue)	5C1-853
308	Bit Retaining Sleeve	5C1-930-4

• To keep downtime to a minimum, it is desirable to have on hand certain repair parts. We recommend that you stock one (pair or set) of each part indicated by a bullet (*) for every four tools in service.

Series 7 Clutches Parts List

Item	Part Description	7P1	7P3
	Positive Drive Attachment	7P1	7P3
401	Clutch Housing Assembly	7P1-A580A	7P3-A580A
402	Housing Bushing	7P1-781	7C3-781
403	Finder Retaining Spring	---	102A60-628
404	Bit Holder	7P1-586	---
405	Bit Holder Assembly	---	7P3-A586
406	Bit Retaining Spring	---	102A60-241
407	Bit Retaining Ball	---	AV1-255
* 408	Clutch Jaw (2)	PX3-587	PX3-587
409	Clutch Jaw Retaining Ring	R2-285	R2-285
* 410	Clutch Driver	7P-581	7P-581
411	Clutch Driver Spacer	7P1-211	7P1-211
412	Disengaging Plunger	7P1-584	7P1-584
413	Plunger Spring	RX2-626	RX2-626
* 414	Clutch Driver Spacer Retainer	7AH-118	7AH-118
* 415	Bit Retaining Ball	RX1-629	---
* 416	Bit Retaining Sleeve	5C1-930-4	---
* 416A	Sleeve Spring Retainer (Blue)	5C1-853	---
* 417	Retaining Sleeve Spring	5C1-931-4	---
418	Finder Spring	---	102A60-242
*	Bit Holder Guide	---	102A60-630

* To keep downtime to a minimum, it is desirable to have on hand certain repair parts. We recommend that you stock one (pair or set) of each part indicated by a bullet (*) for every four tools in service.

* Not illustrated.

Parts and Maintenance

When the life of the tool has expired, it is recommended that the tool be disassembled, degreased and parts be separated by material so that they can be recycled.

Tool repair and maintenance should only be carried out by an authorized Service Center. Refer all communications to the nearest **Ingersoll-Rand** Office or Distributor.

Related Documentation

For additional information refer to:

Product Safety Information Manual 04585006.
 Product Information Manuals 80167299, 80167349.
 Product Maintenance Information Manual 16575276.

Manuals can be downloaded from www.irttools.com.

www.irttools.com

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